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10/053,497	11/09/2001	Cecile Drogou	1974.PKG	3378
7590 07/22/2008 Cynthia L. Foulke			EXAMINER	
NATIONAL STARCH AND CHEMICAL COMPANY			PATTERSON, MARC A	
10 Finderne Avenue Bridgewater, NJ 08807-0500		ART UNIT	PAPER NUMBER	
,			1794	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Application No. Applicant(s) 10/053 497 DROGOU ET AL. Office Action Summary Examiner Art Unit MARC A. PATTERSON 1794 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 21 April 2008. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-8 and 21-32 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) \_\_\_\_\_ is/are allowed. 6) Claim(s) 1-8 and 21-32 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are; a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abevance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received.

| Attachment(s) | Attachment(s

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### DETAILED ACTION

#### NEW REJECTIONS

#### Claim Rejections - 35 USC § 102(b)

 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- Claims 1 2, 21 22 and 30 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Brady et al (U.S. Patent No. 4,816,306).

With regard to Claims 1-2, Brady et al disclose a process for bonding difficult - to - bond substrates comprising bonding a first substrate to a second substrate (carton sealing; column 1, lines 6-12) with a hot - melt adhesive composition (column 1, lines 6-12); the composition is therefore thermoplastic, and Brady et al teach that the adhesive consists of ethylene n - butyl acrylate copolymer and a wax and a phenolic terpene tackifier (column 1, lines 50-59).

With regard to Claims 21 - 22, Brady et al disclose 30 to 45% by weight ethylene n - butyl acrylate copolymer, 30 to 55% by weight tackifier and 10 to 40% wax (column 1, lines 50 - 59)

With regard to newly submitted Claims 30 - 31, the adhesive comprises an antioxidant (column 2, lines 46 - 47).

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## Claim Rejections - 35 USC § 103(a)

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brady et al (U.S. Patent No. 4,816,306) in view of Hansen (U.S. Patent No. 5,310,803).

Brady et al disclose an adhesive as discussed above. Brady et al fail to disclose an adhesive comprising ethylene vinyl acetate.

Hansen teaches that it is well known in the art that ethylene n - butyl acrylate copolymer and ethylene vinyl acetate are interchangeable in the making of adhesives, but that ethylene n - butyl acrylate has improved flexibility (column 4, lines 64-68; column 5, lines 1-8). It therefore would have been obvious for one of ordinary skill in the art to provide for ethylene vinyl acetate instead of, or in addition to, ethylene n - butyl acrylate, depending on the desired flexibility of the end product.

 Claims 4 – 5, 23 – 24 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brady et al (U.S. Patent No. 4,816,306) in view of Dupont et al (U.S. Patent No. 5,325,781).

Brady et al disclose a process for bonding substrates as discussed above. The substrates comprise paper (column 12, lines 54 - 55). With regard to Claims 4 - 5, 23 - 24 and 32, Brady et al fail to disclose a substrate which is treated with ultraviolet varnish.

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Dupont et al teaches the treatment of paper (column 1, line 18) with ultraviolet varnish (covered with UV varnish; column 3, lines 30 - 32) for the purpose of obtaining a paper having good mechanical properties when ink is applied to the paper (column 3, lines 25 - 30). Therefore, one of ordinary skill in the art would have recognized the advantage of providing for Brady et al, which is a paper substrate, with the ultraviolet varnish of Dupont, depending on the desired mechanical properties of ink applied to the finished paper.

It therefore would have been obvious for one of ordinary skill in the art at the time

Applicant's invention was made to have provided for treatment with ultraviolet vamish of

Dupont et al in Brady et al in order to ensure good mechanical properties for the paper when ink
is applied to the paper as taught by Dupont et al.

 Claims 6 - 8 and 25 - 27 are rejected under 35 U.S.C. 103(a).as being unpatentable over Brady et al (U.S. Patent No. 4,816,306) in view of Howells (U.S. Patent No. 4,566,981).

Brady et al disclose a process for bonding substrates comprising paper as discussed above. With regard to Claims 6 - 8 and 25 - 27, Brady et al fail to disclose a substrate which is fluorochemical treated and grease - resistance treated.

Howells teaches the treatment of a paper (column 1, lines 9 - 10) with a fluorochemical, for the purpose of imparting oil resistance on the paper (column 1, line 10 - 12). Therefore, one of ordinary skill in the art would have recognized the advantage of providing for treatment of the substrate disclosed by Brady et al, which comprises paper, with the fluorochemical taught by Howells, depending on the desired oil resistance, and therefore grease - resistance of the paper as taught by Howells.

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It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for the treatment with a fluorochemical in Brady et al in order to obtain a substrate, both paper, which is treated for grease resistance as taught by Howells.

 Claims 28 - 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brady et al (U.S. Patent No. 4,816,306) in view of Gruber et al (U.S. Patent No. 5,475,080).

Brady et al disclose a process for bonding substrates comprising paper as discussed above. With regard to Claims 28 - 29, Brady et al fail to disclose a substrate which has a surface energy between 25 dyn/cm and 35 dyn/cm.

Gruber et al teach a paper (column 6, lines 17 - 18) treated with a coating which imparts to the paper a surface energy of 35 dyn/cm (column 6, lines 35 - 37) and which provides the paper with enhanced strength and water resistance (column 1, lines 23 - 25). Therefore, one of ordinary skill in the art would have recognized the utility of providing the coating of the substrate by Brady et al, which is paper, with the coating of Gruber et al, depending on the desired strength and water resistance of the end product as a taught by Gruber et al.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for a coating, which imparts to the substrate a surface energy of 35 dyn/cm, in Brady et al, in order to obtain a substrate with enhanced strength and water resistance as taught by Gruber et al.

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#### ANSWERS TO APPLICANT'S ARGUMENTS

- The new rejections of Claims 1 8 and 21 32 are in response to the amendment dated
   April 21, 2008.
- Applicant's amendment necessitated the new ground(s) of rejection presented in this
  Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a).
  Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc A Patterson whose telephone number is 571-272-1497.
 The examiner can normally be reached on Mon - Fri 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Marc A Patterson/ Primary Examiner, Art Unit 1794